

Work Order ID 126212

November-03-14 2:58:03 PM

126212

Page 1

Item ID: 41228-301-063-001

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fuel Return Cavity, LH

Start Date: 11/03/14 Start Qty: 3.00

3

Cust Item ID:

Required Date: 11/21/14 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan: CL

Date: 14/11/04

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

41228-301-063

D

110

0.00

110

Purchasing

Memo

0.00

Purchasing

ISSUE P/O: 26381
SUPPLIER: MSA Aircraft Products Inc.

MANUFACTURE AS PER DWG AND SPEC

MATERIAL CERTS IS REQUIRED

CL 14/11/04 3

120

Receive & Inspect for Damage & Mat'l Certs

0.00

120

Packaging

Memo

0.00

Packaging

3x 5015-05-14

Work Order ID 126212***126212***

Page 2

November-03-14 2:58:03 PM

Item ID: 41228-301-063-001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Fuel Return Cavity, LH

Stop ***NS2***

Start Date: 11/03/14 Start Qty: 3.00

3

Cust Item ID:

Required Date: 11/21/14 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

(3)

DAS
38
9-89

MAY 23 2015

140

0.00

140

Small Fab

Memo

0.00

Small Fab

DRILL HOLES AS PER DWG

DEBURR

(1)

KC
15-6-18

150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.00

Quality Control

Work Order ID 126212***126212***

Page 3

November-03-14 2:58:03 PM

Item ID: 41228-301-063-001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Return Cavity, LH
Start Date: 11/03/14 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 11/21/14 Req'd Qty: 3.00 ***3*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: _____	0.00							
190									
Packaging	Memo	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

Closed as incomplete
write off
h
17 Nov 24

Picklist Print

November-03-14 2:58:02 PM

Page 1

Work Order ID: 126212

126212

Parent Item: 41228-301-063-001

41228-301-063-001

Parent Item Name: Fuel Return Cavity, LH

Start Date: 11/03/14

Required Date: 11/21/14

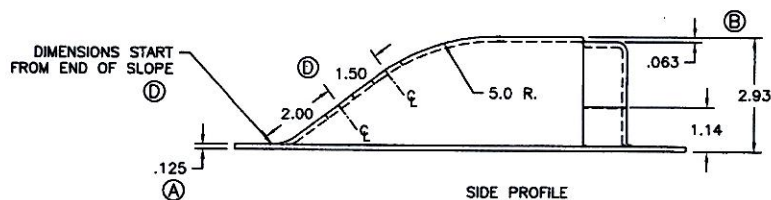
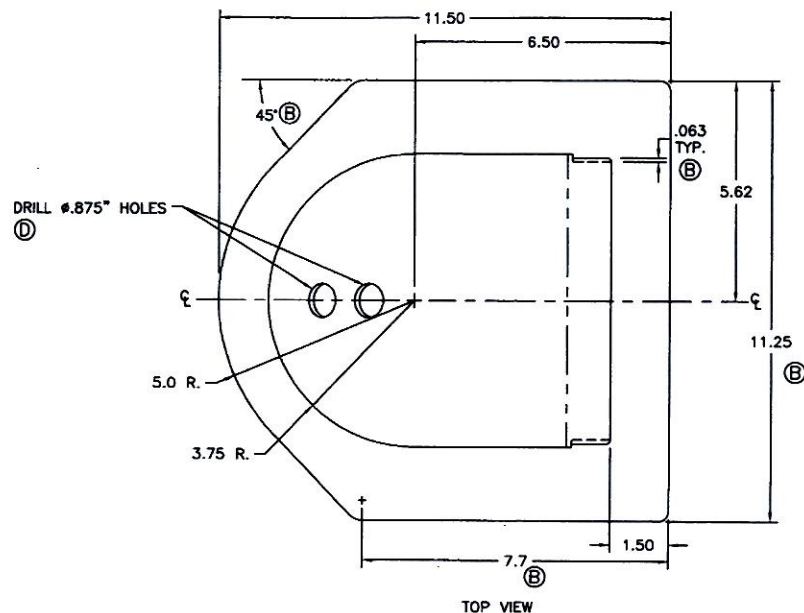
Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 14.11.03 NEW ISSUE DD VERF:JLM

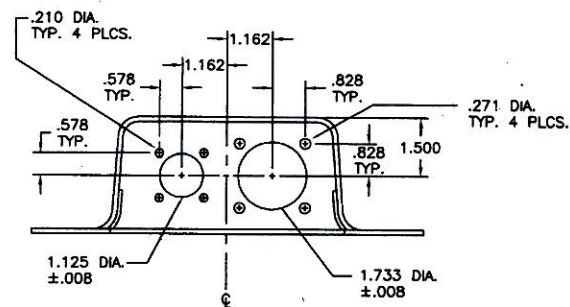
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
41228-301-063-001P		Purchased			No		Each	0.0000		3			
41228-301-063-001P									**				
Fuel Return Cavity, LH													

3x 8015-05-14



REVISION					
LETTER	DFTSMAN	DATE	DESCRIPTION	APPROVED	DATE
A	TAH	3/2/95	CHANGE FLANGE THICKNESS		
B	TAH	3/6/95	GENERAL UPDATE		
C	DNN	12/14/95	INCORPORATED E.O. C-1.	P. SCHWITZ 96.014 96.015 96.016	3/21/96 3/21/96 3/21/96
D	DNN	6/14/05	INCORP. E.O. D-1 & D-2; CHANGED -001 TO OPPOSITE & -002 TO SHOWN; ADDED .875" HOLES TO THE -001 COMPOSITE ONLY. MINOR CHANGE - FAR 21.95		

CH1411104
W/O. 126212



41228-301-063-001 CAVITY (OPPOSITE) ①
41228-301-063-002 CAVITY (SHOWN) ①

△ OBTAIN CONTOURS AND HOLE PATTERN LOCATIONS FROM MASTER PATTERN 41228-301-063-001 USING MOLD P/N 41202-301-063-001.

△ OBTAIN CONTOURS AND HOLE PATTERN LOCATIONS FROM MASTER PATTERN 41228-301-063-002 USING MOLD P/N 41202-301-063-002.

△ FABRICATE IN ACCORDANCE WITH FLIGHT COMPOSITES INC. PROCESS SPECIFICATION NO. 609-3.

NOTES: ©

		41228-301-063-002	CAVITY					
		41228-301-063-001	CAVITY					
		PART NO.	NAME	STOCK SIZE	MATERIAL	MATL. SPEC.	ZONE	
		LIST OF MATERIAL						
		NO. REQ'D PER ASSY.						
		PROPRIETARY RIGHTS NOTICE						
		UNLESS OTHERWISE SPECIFIED	DFTSMAN	T. HARMILLE	2/15/95	TITLE		
			CHECK			FUEL RETURN CAVITY		
			STRESS			DWG. SIZE	C	SCALE
			PROL. ERROR					1"=2"
			HEAT TREAT			DWG. NO.	41228-301-063	REV.
			FINISH			Era Helicopters LLC		
								D



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO26381

Purchase Order Date 11/4/2014

PO Print Date 11/4/2014

Page Number 1 of 2

Order From :
MSA AIRCRAFT PRODUCTS INC.
10000 LOTA DR
SAN ANTONIO, TX 78217

VU-MSA01

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

COD

USD

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	71550-20 PROOF PART	TOOL AND WET LAYUP PART	11/18/2014 Yes 11/18/2014		1.00 Each	\$2,700.00	\$2,700.00
SP15-01-16						Line Total:	\$2,700.00
2	41228-301-063-001P AS PER DWG 41228-301-063-001 REV. D B126212	Fuel Return Cavity, LH	12/12/2014 Yes 12/12/2014	FN	3.00 Each	\$375.00	\$1,125.00
SP15-05-14						Line Total:	\$1,125.00
3	41228-301-063-002P AS PER DWG 41228-301-063-002 REV. D B126214	Fuel Return Cavity, RH	12/12/2014 Yes 12/12/2014	FN	3.00 Each	\$375.00	\$1,125.00

Note:

11/4/2014

SHIPPER/PACKING LIST

44478

(Page 1 of 1)

SHIPPER



10000 Iota Dr.
San Antonio, TX. 78217
Phone: (210) 590-6100
Fax: (210) 590-6884

DART AEROSPACE LTD

1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

WAYBILL 773583104080

Job #: RA#: - Orig Job:

AIRCRAFT #:

P.O. #: PO26381

SHIP DATE: 5/12/2015

PACKED BY:

SHIPPED VIA: Fed X Pri

Attn: LINDA LACELLE

Phone: 613 632-9577

☒ PREPAID ☐ MSA ☒ RECIPIENT
☐ 3rd PARTY
☐ COLLECT ☐ BILL FREIGHT

JOB:

☒ COMPLETE☐ PARTIAL

ITEM NO.	QUANTITY	ORD	SHIP	UOM	STOCK CODE	PART NUMBER / DESCRIPTION / SERIAL NUMBERS
1	1	0			26629	41228-301-063-001 s/n 107851 FUEL RETURN CAVITY: PROOF PART (THIS LINE ITEM SHIPPED ON PACKING LIST 43978 January 15, 2015)
2	1	1				MSA Label: Product s/c: 26629 Model No. 41228-301-063-001 s/n: 107851 wo: 12369 (Label in MSA envelope: place this label on "line 1, proof part at your facility)
3	3	(3)			26629	41228-301-063-001 FUEL RETURN CAVITY S/N: 106990, 106991, 106992
4	3	(3)			26630	41228-301-063-002 FUEL RETURN CAVITY S/ N: 106993, 106994, 106995
5	1	1				Conformance Statement Manilla Envelope

SP15-05-14

SP15-05-14

PLATING INSTRUCTIONS

Parts To Be Plated:

Charge To:

P.O. #:

Return By:

Special Note:

CERTIFICATE OF CONFORMITY

IT IS HEREBY CERTIFIED THAT THE ITEMS DESCRIBED ON PURCHASE ORDER PO26381 FOR DART AEROSPACE LTD HAVE BEEN INSPECTED AND FOUND TO COMPLY WITH MSA DESIGN DATA AND SPECIFICATIONS MAINTAINED ON FILE AT THIS FACILITY.

MANAGER QUALITY ASSURANCE

RECEIVED BY:

Aircraft Products, INC.
10000 Iota Dr. Sa, TX 78217

The enclosed information describes materials used in the manufacture of aircraft parts for your

Work Order No: 12369

Released To: **MSA Aircraft**
10000 Iota
San Antonio, TX 78816

[illegible]

"This is to certify that all material and work was supplied against the Purchase Order and processed accordance with all applicable requirements, specifications and/or drawings referred to in your order". Mark Boyle QA/QC Inspector April 1, 2015
Authorized Signature Title Date

CERTIFICATE OF CONFORMANCE

The enclosed information describes materials used in the manufacture of all the below listed aircraft parts for **MSA Aircraft Products, INC.**

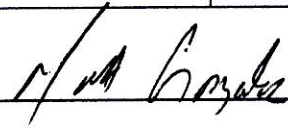
Final Certifications, if required, will be provided when each purchase order is 100% complete. These Documents show compliance with applicable drawings, specifications and other approved acceptance criterion.

Traceability of all materials used in the manufacture of the parts are on file at MSA Aircraft Products INC.

Materials Premanufactured and/or Components

Material, Part	Batch No.	QA Control	Date of Mfg
AX-3110-OST-7781-50	386	14-55650	7/9/13

Parts Manufactured From this Material for:	Part No.	Serial No.	P.O. No. J.N.	Shipper No
MSA Aircraft 10000 Iota San Antonio, TX 78217	41228-301-063-001	106990-91-92; 107851	12369	
	41228-301-063-002	106993-94-95	12369	
	MSA-038-220-1200B	106996-97-98-99	12369	



QA/QC Inspector

April 1 2015

Product Data and parameters have been obtained using the materials listed under carefully controlled conditions. This information, therefore, is believed to be accurate and correctly stated. The enclosed data is indicative of representative properties obtained. The finished parts are the combined results of all the materials listed MSA AIRCRAFT PRODUCT INC.. cannot accept responsibility for the misapplication of the product nor their use under uncontrolled conditions.

CERTIFICATE OF CONFORMANCE

CUSTOMER:	MSA AIRCRAFT PRODUCTS, INC.		
Purchase Order Number:	55650	Certification Date:	12/1/2014
Sales Order Number:	11057	Warranty Expiration Date:	6/1/2015
Product:	AX-3110-OST-7781-50" RC42	Date of Manufacture:	11/24/2014
Description:	Woven Fiberglass Prepreg.	Storage Temperature:	40°F or below
Description (ctd):	Modified Epoxy, FR, RC 42%	Sales Order Quantity:	1,320 yd
Batch Number:	386	Production Quantity:	1,360 yd

Test Report

Specifications: MIL-R-9300B, FAR 25.853 & Axiom Test Standard

Test, Roll # 1	Requirement	Result	Test Method
Weight/psf	0.103 ± 0.006	0.107	ATS-001
Gel Time/second	Report	366	ATS-003
Volatiles/%	Report	0.212	Sec. 4.6.6
Flow/%	Report	24.146	Sec. 4.6.8
Resin Content/%	42 ± 3	43.925	Sec. 4.6.7
60 second vertical burn *			
Extinguishing Time/second	15 maximum	0	FAR 25.853 Appendix F, Part I (a)(1)(i)
Burn Length/inch	6 maximum	3.444	
Drip/Debris Extinguish/second	3 maximum	0	
Test, Roll # 11	Requirement	Result	Test Method
Gel Time/second	Report	366	ATS-003
Resin Content/%	42 ± 3	41.747	Sec. 4.6.7
Production Standard	Requirement	Result	Test Method
Visual Inspection	Pass	Pass	ATS-013
Tack Level / Number	Medium / 3	Medium / 3	ATS-015
Nominal Core Diameter	3"	3"	ATS-013
Sides Coated	One	One	ATS-013
Color	Natural	Natural	ATS-013
Liner Configuration	One Side 1.3 mil Red Poly	One Side 1.3 mil Red Poly	ATS-013

This document certifies material supplied to this order to the following requirements:

Purchase order terms and conditions
Axiom Test Standards (where applicable)
All terms and conditions of the Purchase Order Agreement
Specifications as noted below

Specification(s):

Meets the performance requirements of:

Axiom Test Standard
FAR 25.853 Appendix F, Part I (a)(1)(i)
AMS-C-9084, Class 2 Type VIII B
MIL-R-9300B, Type 1

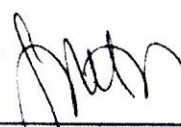
* 3 ply laminate cured 250°F 60 mins 40 psi

CERTIFICATE OF CONFORMANCE

CUSTOMER:	MSA AIRCRAFT PRODUCTS, INC.		
Purchase Order Number:	55650	Certification Date:	12/1/2014
Sales Order Number:	11057	Warranty Expiration Date:	6/1/2015
Product:	AX-3110-OST-7781-50" RC42	Date of Manufacture:	11/24/2014
Description:	Woven Fiberglass Prepreg.	Storage Temperature:	40°F or below
Description (ctd):	Modified Epoxy, FR, RC 42%	Sales Order Quantity:	1,320 yd
Batch Number:	386	Production Quantity:	1,360 yd

Test Report





Signature of Authorized Agent